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ABSTRACT

Spurs cause significant problems with signal detecting, amplifier gain adjustment, and signal decoding. Various techniques can be used to mitigate the effects of spurs on a received signal. Generally, these techniques work by either canceling or ignoring the spurs. For example, a pilot mask can be used to ignore pilot information in one or more sub-channels. A Viterbi mask can determine the weighting given to bits in a sub-channel based on spur and data rate information. Channel interpolation can compute a pseudo channel estimate for a sub-channel known to have a spur location can be computed by interpolating the channel estimates of adjacent good sub-channels. Filtering of the received signal using a low-pass filter, a growing box filter, or a low-pass filter with self-correlation can be used to cancel a spur.